USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

Released: October 4, 2010
Vol. 60, WC100410

USDA, NASS, Indiana Field Office
1435 Win Hentschel Blvd.
Suite 110
West Lafayette, IN 47906-4151
(765) 494-8371
nass-in@nass.usda.gov

CROP REPORT FOR WEEK ENDING OCTOBER 3

AGRICULTURAL SUMMARY

Weekend rain showers did little to alleviate the drought conditions in many central and southern portions of the state, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. In fact, precipitation amounts in some southeastern counties were only 20 to 25 percent of normal during September. Multiple field and combine fires have been reported this fall, and currently 62 counties have active burn bans in place. Harvest of both corn and soybeans forged ahead at a blistering pace. Corn harvest continued moving ahead of the previous record of 57 percent established in 1991. Soybean harvest is approaching the record pace which occurred in 1987 when 65 percent had been harvested.

FIELD CROPS REPORT

There were 6.4 **days suitable for field work.** Ninety-eight percent of the **corn** is **mature** compared to 48 percent last year and 75 percent for the 5-year average. Sixty-four percent of the corn crop has been **harvested** compared to 5 percent last year and 18 percent for the 5-year average. By area, approximately 55 percent of the corn acreage has been harvested in the north, 64 percent in the central region, and 80 percent in the south. **Moisture** content of harvested corn is averaging about 15.5 percent.

Ninety-five percent of the **soybean** acreage is **shedding leaves** compared with 76 percent last year and 86 percent for the 5-year average. Sixty-three percent of the soybean acreage has been **harvested** compared with 8 percent for last year and 22 percent for the 5-year average. By area, approximately 55 percent of the soybean crop has been harvested in the north, 72 percent in the central region, and 58 percent in the south. **Moisture** content of harvested soybeans is averaging about 10.5 percent.

Twenty-seven percent of the **winter wheat** acreage has been **planted** compared to 5 percent last year and 14 percent for the 5-year average. **Tobacco harvest** is 95 percent complete compared with 79 percent last year and 82 percent for the 5-year average.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 10 percent good to excellent compared with 56 percent last year. Some producers in southern counties are being forced to haul water to livestock as normal sources have dried up. Livestock are reported to be in mostly good condition.

CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year Avg.
	Percent			
Corn Mature	98	94	48	75
Corn Harvested	64	46	5	18
Soybeans Shedding Lvs.	95	89	76	86
Soybeans Harvested	63	41	8	22
Winter Wheat Planted	27	10	5	14
Winter Wheat Emerged	4	NA	0	1
Tobacco Harvested	95	88	79	82

CROP CONDITION

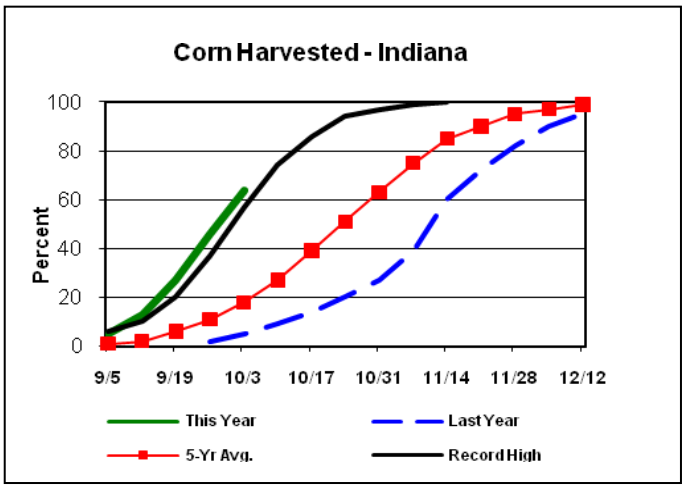
Crop	Very Poor	Poor	Fair	Good	Excel-lent
	Percent				
Corn	4	12	27	44	13
Soybean	5	12	29	41	13
Pasture	36	29	25	9	1

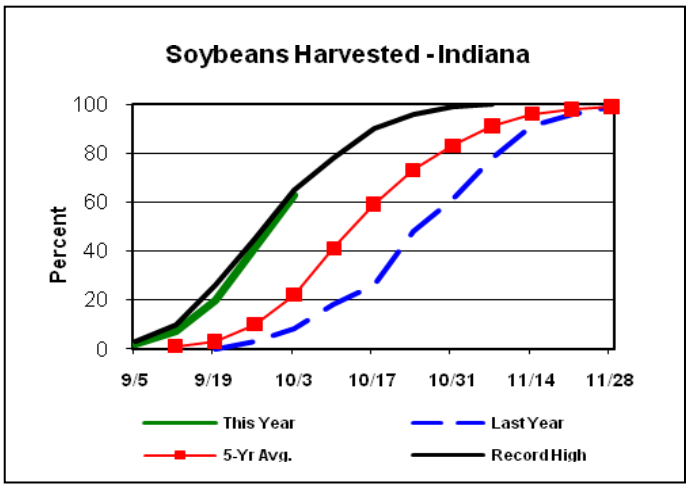
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK

Soil Moisture	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	50	46	1
Short	36	40	11
Adequate	14	14	70
Surplus	0	0	18
Subsoil			
Very Short	43	38	2
Short	42	44	20
Adequate	15	18	68
Surplus	0	0	10
Days Suitable	6.4	6.5	3.9

CONTACT INFORMATION

--Greg Preston, Director
--Andy Higgins, Agricultural Statistician
E-mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/Statistics_by_State/Indiana/





Other Agricultural Comments And News

Fall Tillage Decisions in 2010

Written by Tony J. Vyn, Purdue University. Article appeared in the September 27, 2010 issue of Pest & Crop, and can be found at:
http://www.extension.entm.purdue.edu/2010/issue25/index.html

In sharp contrast to last year's delayed crop maturity, late harvest and excessive rain, the 2010 corn and soybean harvest (thus far at least) has been extremely early and with mostly dry soil conditions. Those ideal conditions for harvest, and perhaps lingering frustrations over the inability to complete the intended fall tillage in 2009, have prompted many Indiana farmers to begin fall tillage within days of completing harvest on their individual fields.

Chisel plows, disks, disk-rippers, strip-till tools, moldboard plows and assorted vertical tillage equipment have seen lots of action already on many farms this September. The prevailing dry soil conditions have increased the draft (horsepower) requirements for operating at the intended depths, but there has been no shortage of traction. Generally higher crop prices this fall have made fuel costs for tillage seem less of a financial burden.

However, the main question is whether all that fall tillage should be done at all. Are this fall's tillage-conducive conditions (early harvest, dry soils, labor availability, etc.) reason enough for doing more intensive tillage than normal? Related questions involve considerations of what tool and how deep for specific soil type, field slope, and crop residue situations. I can't address all these and other relevant questions in this short article, but certain research experiences may be relevant to the tillage decisions still to be made in 2010.

Crop Rotation:

Historically, the majority of fall tillage occurs before corn in Indiana. Zero tillage is much more common for soybean (60-70% of the acreage) than it has been for corn (20-29%) over the last decade. Research results from our long-term (1975-2010) crop rotation and tillage experiment on a dark prairie soil (silty clay loam with an average of 4% organic matter) near West Lafayette over the 10-year period from 2000 to 2009 indicate that there is no yield advantage for chisel or moldboard plowing, relative to no-till, when corn follows soybean (Table 1). Fall tillage was only beneficial to corn yield when corn followed corn.

Corn yield results in 2010 confirm the fact that crop rotation had a much bigger impact than tillage systems (Table 1). Growing corn after corn can sometimes have a huge yield penalty associated with it; the cool and excessively wet conditions in May and June appeared to be detrimental to continuous corn yields in 2010 even though we applied 200 pounds per acre of N fertilizer to these plots. In fields with timely corn planting (April) and little flooding damage during June, corn yields in 2010 were much less likely to be affected by tillage (witness the small 3-6 bushel spread among tillage systems in Table 1) than by rotation (note the 35 bushel yield gain for corn after soybean versus corn). So although the use of more stress tolerant corn hybrids, better seed treatments, and superior equipment and fertility management has helped to diminish the rotation advantage for corn compared to that in earlier decades, there still is additional yield risk in planting corn after corn regardless of the tillage system that is selected.

Table 1. Corn yield response to rotation and tillage systems in an experiment initiated in 1975 on a dark prairie soil near West Lafayette, Indiana (*Data courtesy of T. West, G. Steinhardt, and T. Vyn of the Agronomy Department*)

Crop Rotation	Tillage System	Corn Yields 2000-2009 (Bushels/Acre)	Corn Yields in 2010 (Bushels/Acre)
Continuous Corn	Moldboard Plow	200	184
	Chisel Plow	195	187
	No-till	178	186
Soybean - Corn	Moldboard Plow	202	216
	Chisel Plow	204	222
	No-till	201	220

(continued on page 4)

Weather Information Table

Week Ending Sunday, October 3, 2010

Station	Past Week Weather Summary Data							Accumulation				
		Air Temperature			Precip.		Avg 4 in Soil Temp	April 1, 2010 through October 3, 2010				
								Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days		Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	78	39	56	-6	0.25	1		31.08	+8.70	70	3303	+242
Francesville	77	36	55	-4	0.13	1		26.49	+3.82	66	3252	+445
Valparaiso_AP_I	75	40	56	-4	0.49	2		25.20	+0.80	71	3299	+504
Wanatah	77	37	53	-6	0.35	2	62	24.93	+1.38	65	3094	+428
Winamac	77	39	55	-4	0.36	3		26.21	+3.54	76	3338	+531
North Central (2)												
Plymouth	76	37	54	-6	0.09	2		23.70	+0.46	62	3174	+221
South_Bend	74	36	55	-5	0.12	1		21.65	-0.93	69	3304	+537
Young_America	77	38	55	-6	0.32	2		30.72	+8.74	58	3282	+378
Northeast (3)												
Fort_Wayne	78	39	56	-4	0.40	3		23.41	+3.27	63	3603	+700
Kendallville	75	39	54	-5	0.63	4		22.99	+1.78	87	3173	+444
West Central (4)												
Greencastle	77	40	55	-7	0.34	1		25.33	-0.12	68	3275	-3
Perrysville	81	37	56	-5	0.29	2	67	27.25	+3.41	63	3717	+669
Spencer_Ag	79	42	58	-3	0.23	1		28.39	+2.89	62	3606	+533
Terre_Haute_AFB	80	41	57	-5	0.29	1		27.45	+3.41	70	3862	+609
W_Lafayette_6NW	79	36	55	-6	0.36	1	65	27.14	+4.76	60	3489	+599
Central (5)												
Eagle_Creek_AP	80	41	59	-3	0.32	1		23.83	+1.39	65	4002	+778
Greenfield	78	40	57	-5	0.38	1		29.59	+5.09	68	3645	+543
Indianapolis_AP	80	42	59	-3	0.28	1		21.21	-1.23	57	4142	+918
Indianapolis_SE	77	41	57	-5	0.26	1		22.86	-0.01	62	3580	+361
Tipton_Ag	78	39	56	-4	0.37	2	66	27.91	+5.10	67	3392	+591
East Central (6)												
Farmland	77	39	56	-4	0.81	2	62	26.90	+4.75	74	3421	+687
New_Castle	80	40	55	-4	0.46	1		28.86	+5.42	67	3269	+466
Southwest (7)												
Evansville	85	42	62	-3	0.09	2		13.61	-9.04	53	4524	+786
Freelandville	81	41	60	-3	0.19	2		23.83	+0.23	56	4062	+701
Shoals_8S	82	37	57	-6	0.12	2		24.70	-0.75	46	3748	+488
Stendal	85	43	62	-1	0.12	2		20.38	-4.94	48	4509	+987
Vincennes_5NE	81	43	59	-3	0.18	1	73	28.39	+4.79	61	4112	+751
South Central (8)												
Leavenworth	83	43	60	-2	0.08	1		21.93	-3.73	80	4100	+863
Oolitic	81	40	57	-4	0.18	2	67	24.55	+0.20	61	3684	+573
Tell_City	84	46	63	-2	0.04	1		19.72	-6.20	44	4393	+778
Southeast (9)												
Brookville	82	40	59	-2	0.14	1		21.81	-1.78	62	3744	+790
Greensburg	83	45	59	-2	0.24	1		23.73	-0.10	60	4031	+1009
Seymour	80	39	58	-4	0.15	1		19.89	-3.36	53	3653	+551

DFN = Departure From Normal.
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

For more weather information, visit www.awis.com
or call 1-888-798-9955.

Field Leveling: In some cases, fields are still rough from the ruts created during the wet harvest conditions of 2009. In those field and field-area specific situations, fall tillage operations may have additional justification. But recognize that tillage is always only a partial solution on compaction-damaged soils. Weather conditions (freeze-thaw and wetting and drying cycles) as well as crop root development (field crops and cover crops) have a lot of impact on soil structure development over time. The loosening forces of tillage tools result in short-lived changes in soil structure, and soil reconsolidation is likely due to natural (weather related) and management (e.g., wheel traffic) events.

The unusually dry soil conditions thus far this fall have actually created ideal situations for the breaking up of compacted layers and the smoothing over of previously rutted fields. But even then, care should be taken to going no deeper than necessary and to leave as much protective surface residue as possible. The wide range of soil wetting and drying cycles experienced this year have already restored some soil structure (and particularly for fields with swelling and shrinking clay soils). Taking a shovel to suspected compaction areas and probing down to 15 or 20 inches prior to tillage might give farmers a better idea of whether deep loosening is needed, and to what depth.

Planting Date Flexibility: One of the key reasons many farmers prefer to do some tillage in the fall is to ensure that corn planting is not delayed in the spring. Achieving early planting goals is certainly possible in no-till systems, but good soil drainage, uniform residue distribution, and well adjusted no-till planters with sufficient banded N fertilizer are essential to achieve optimum results for a specific soil texture.

Our research experiences over the last 20 years have indicated that fall strip-tillage systems are ideal to give corn farmers additional planting flexibility than an undisturbed no-till situation, especially for situations when corn follows corn or winter wheat. Strip-till does not result in higher yields than no-till when corn follows soybean and all tillage systems are planted on the same date with good management. However, strip-till corn yields have exceeded no-till yields (even after soybean) when the earlier soil drying of properly formed strip-till berms enabled earlier planting than was possible with no-till. Corn yields when fall strip-tilled corn follows corn have consistently been higher than those possible with no-till corn on corn, and equal to those with chisel plowed corn on corn.

I can understand the frustrations and challenges of trying to complete strip tillage following harvest in a fall like 2009. But this year, we appear to have a much wider "window" to successfully create loosened soil strips that will facilitate stale-seedbed planting next spring. However, given the fact that so much crop has been harvested so early, farmers need to be aware that very early fall strip tillage also means more opportunity for berm consolidation re-occurring prior to soil freezing. Achieving good soil conditions in the strips next spring begins with achieving high enough berms this fall that later rain events this fall won't collapse the berms.

Final Comments: Good weather conditions and an early harvest are, by themselves, insufficient justification for intensive fall tillage in 2010. Farmers are encouraged to think carefully through their reasons for doing a particular tillage operation on each field, and recognize that other management factors like crop rotation, hybrid selection and nutrient management will likely have much more impact on the final corn yield in 2011 than the tillage system itself. "Recreational tillage" is still "expensive entertainment."

As always, concern for soil conservation should be paramount. There is still a long time to go between late September of 2010 and April of 2011. Soil that is less subject to wind and water erosion events during that long exposure period will be more likely to be kept in place for near-term and long-term yield benefits.

The INDIANA CROP & WEATHER REPORT (USPS 675-770), (ISSN43-817X) is issued weekly April through November by the USDA, NASS Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette, IN 47906-4151. For information on subscribing, send request to above address. POSTMASTER: Send address change to the USDA, NASS, Indiana Field Office, 1435 Win Hentschel Blvd, Suite 110, West Lafayette, IN 47906-4151.

WEEKLY NEWS REPORT

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